4.2.B. 0601020702 (Bull Run Creek).

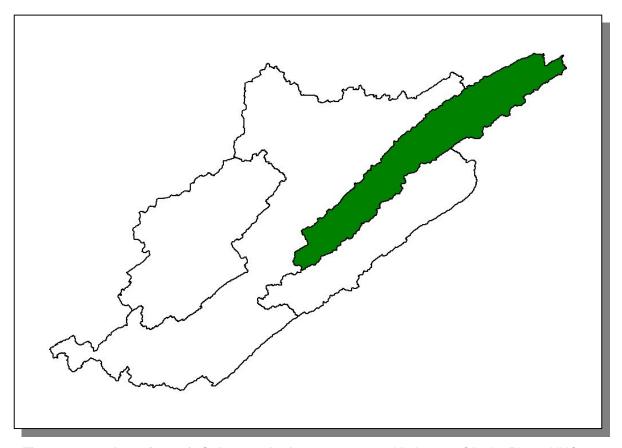


Figure 4-16. Location of Subwatershed 0601020702. All Lower Clinch River HUC-10 subwatershed boundaries are shown for reference.

4.2.B.i. General Description.

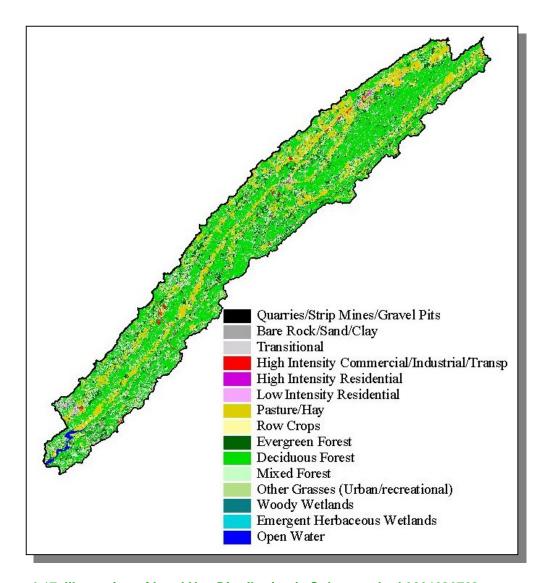


Figure 4-17. Illustration of Land Use Distribution in Subwatershed 0601020702.

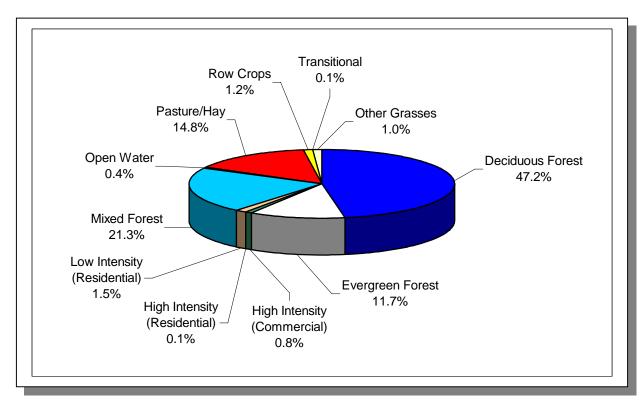


Figure 4-18. Land Use Distribution in Subwatershed 0601020702. More information is provided in Appendix IV.

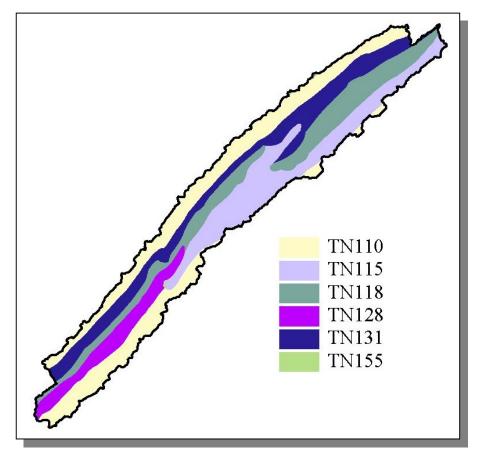


Figure 4-19. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601020702.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN110	0.00	В	2.22	4.96	Loam	0.31
TN115	0.00	С	1.41	5.15	Silty Loam	0.36
TN118	0.00	С	6.52	5.12	Loam	0.29
TN128	0.00	С	1.30	6.53	Clayey Loam	0.26
TN131	0.00	С	1.17	4.95	Silty Loam	0.33
TN155	0.00	С	1.71	5.31	Loam	0.32

Table 4-13. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0601020702. More information is provided in Appendix IV.

	Р	COUNTY OPULATION	N			IATED PO N WATER	PULATION SHED	
County	1990	1997	2000	Portion of Watershed (%)	1990	1997	2000	% Change (1990-1997)
Anderson	68,250	71,498	71,330	4.10	2,795	2,928	2,921	4.5
Grainger	17,095	19,456	20,659	0.55	94	107	113	20.2
Knox	335,749	365,900	382,032	7.90	26,529	28,912	30,186	13.8
Union	13,694	15,956	17,808	19.63	2,688	3,132	3,496	30.1
Totals	434,788	472,810	491,829		32,106	35,079	36,716	14.4

Table 4-14. Population Estimates in Subwatershed 0601020702

			N	UMBER OF HOL	JSING UNITS	
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Luttrell	Union	812	303	4	274	25
Maynardville	Union	1,298	544	366	173	5
Plainview	Union	2,165	853	50	789	14
Totals		4,275	1,700	420	1,236	44

Table 4-15. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 0601020702.

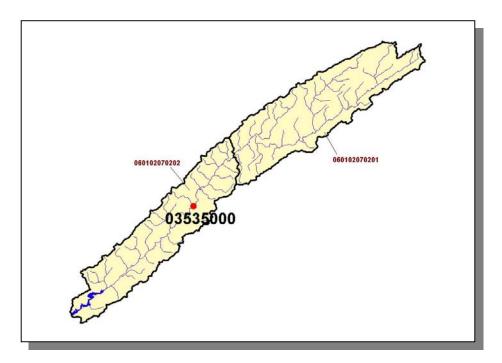


Figure 4-20. Location of Historical Streamflow Data Collection Sites in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information is provided in Appendix IV.

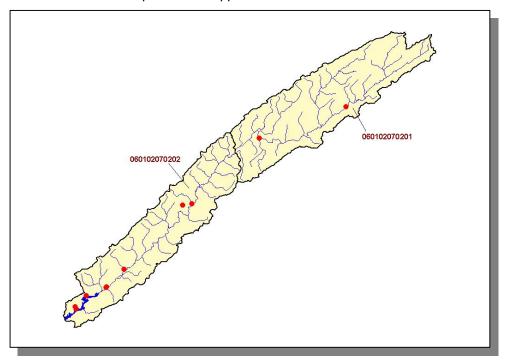


Figure 4-21. Location of STORET Monitoring Sites in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including site names and locations, is provided in Appendix IV.

4.2.B.ii. Point Source Contributions.

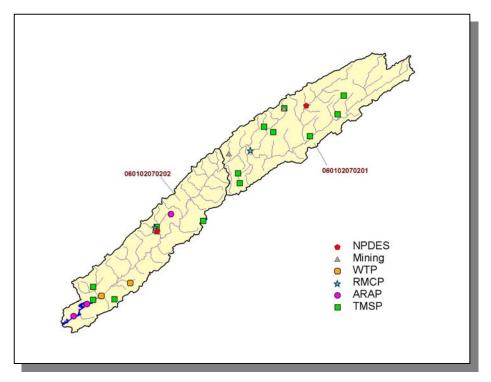


Figure 4-22. Location of Active Point Source Facilities in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

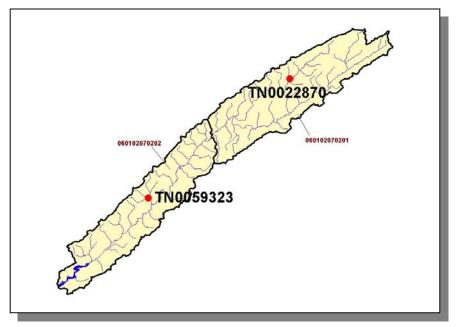


Figure 4-23. Location of NPDES Facilities in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

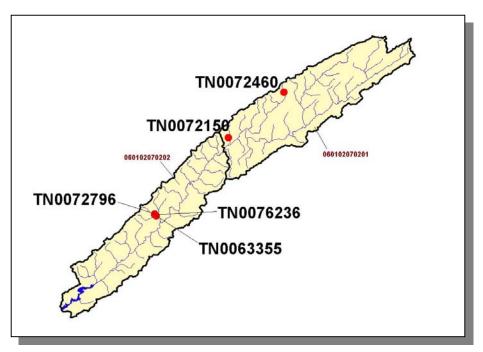


Figure 4-24. Location of Active Mining Facilities in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

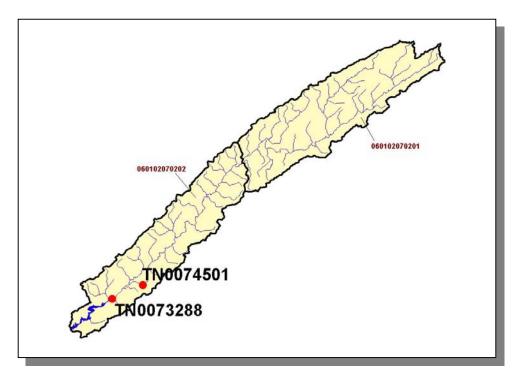


Figure 4-25. Location of Water Treatment Plants in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

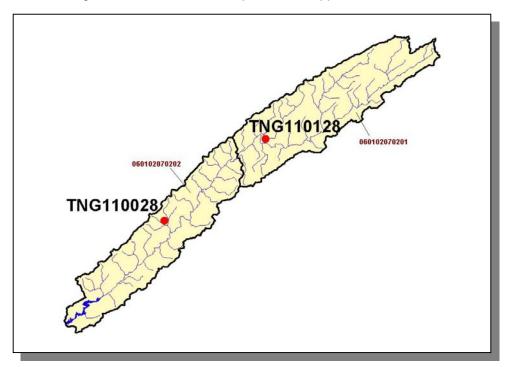


Figure 4-26. Location of Ready Mix Concrete Plants in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

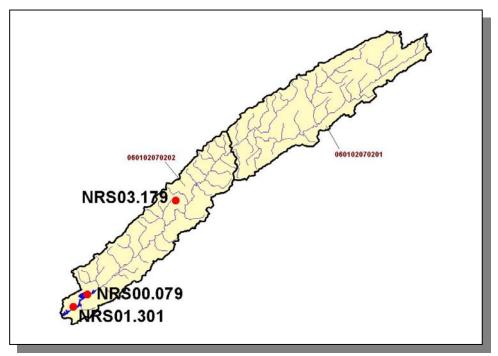


Figure 4-27. Location of ARAP Sites (Individual Permits) in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

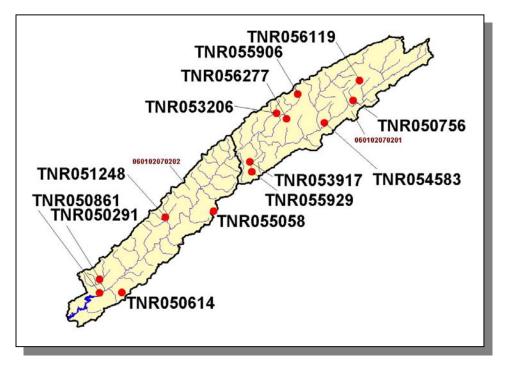


Figure 4-28. Location of TMSP Facilities in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

4.2.B.ii.a. Dischargers to Water Bodies Listed on the 2002 303(d) List

There are two NPDES facilities discharging to water bodies listed on the 2002 303(d) list in Subwatershed 0601020702:

- TN0022870 (Maynardville STP) discharges to North Fork Bull Run Creek
 @ RM 3 1
- TN0059323 (Hallsdale-Powell Raccoon Valley STP) discharges to Bull Run Creek @ RM 12.6

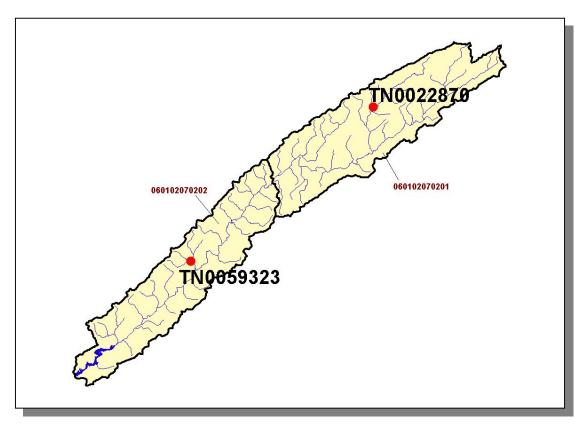


Figure 4-29. Location of NPDES Dischargers to Water Bodies Listed on the 2002 303(d) List in Subwatershed 0601020702. Subwatershed 060102070201 and 060102070202 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0022870	0.50	0.52	0.56	0.47	0.6
TN0059323	4.76	4.90	5.29	4.50	0.3

Table 4-16. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0601020702. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT #	CBOD ₅	FECAL COLIFORM	E. COLI	NH ₃	TRC	TSS	SETTLEABLE SOLIDS	DO	рН
TN0022870	Х	X	Х	Х	Х	Х	Χ	Χ	Х
TN0059323	Х	X	Х	Х	Х	Χ	X	Χ	X

Table 4-17. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0601020702. CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.B.iii. Nonpoint Source Contributions.

		L	IVESTOCK (COUNT	S)		
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens Sold	Hogs	Sheep
2.981	5,807	115	12	<5	83	76

Table 4-18. Summary of Livestock Count Estimates in Subwatershed 0601020702. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVENT	ORY	REMOVAL RATE		
	Forest Land (thousand	Timber Land	Growing Stock	Sawtimber	
County	acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Anderson	124.0	124.0	2.6	6.2	
Grainger	102.6	102.6	0.3	1.8	
Knox	127.5	127.0	2.2	8.2	
Union	102.5	102.5	0.1	0.0	
Total 456.6		456.1	5.2	16.2	

Table 4-19. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 0601020702.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.77
Legumes (Hayland)	1.07
Grass (Hayland)	1.02
Legumes, Grass (Hayland)	1.02
Grass, Forbs, Legumes (Mixed Pasture)	1.18
Forest Land (Not Grazed)	0.00
Forest Land (Grazed)	0.00
Corn (Row Crops)	1.28
Soybeans (Row Crops)	15.54
Tobacco (Row Crops)	2.22
Wheat (Close-Grown Cropland)	4.44
Other Vegetable and Truck Crops	12.06
Non-Agricultural Land Use	0.00
Other Land in Farms	0.23
Farmsteads and Ranch Headquarters	0.32

Table 4-20. Annual Estimated Total Soil Loss in Subwatershed 0601020702.